CLAIM AMENDMENTS

1. (currently amended) A method of making a strained layer on a substrate, the method comprising the steps of:

providing on the substrate in a single epitaxial deposit a ~~t least one~~ first epitaxial relaxing layer and on it a second epitaxial layer to be subjected to strain;

generating with ion implantation a defect region in a layer neighboring the second epitaxial layer to be subjected to strain [[,]]; and

relaxing a ~~t least one~~ layer neighboring the second epitaxial layer to strain the second epitaxial layer.

2. (previously presented) The method according to claim 1 wherein dislocations extend from a defect region which give rise to a relaxation of one of the layers neighboring the layer to be strained.

3. (currently amended) The method according to claim 1 wherein the [[one]] first epitaxial layer neighboring the second epitaxial layer is subjected to at least one thermal treatment or oxidation for relaxation.

4. (previously presented) The method according to claim 1 wherein the defect region is produced in the substrate.

5. (currently amended) The method according to claim 1 wherein at least one [[first]] further epitaxial layer is epitaxially deposited on the layer to be strained.

6. (currently amended) The method according to claim 5 wherein the [[first]] further epitaxial layer has a different degree of ~~dislocation~~ strain than the second epitaxial layer.

7. (currently amended) The method according to claim 5 wherein the first epitaxial layer is relaxed.

8. (previously presented) The method according to claim 1, further comprising the step of

depositing a further layer between the layer to be strained and the substrate.

9. (currently amended) The method according to claim 8 wherein the further layer has a different degree of ~~dislocation~~ strain than the layer to be strained.

10. (previously presented) The method according to claim 1 wherein a plurality of layers are relaxed.

11. (previously presented) The method according to claim 1 wherein a plurality of layers to be strained are strained.

12. (currently amended) The method according to claim 1 wherein an epitaxial layer structure comprised of a plurality of layers on ~~different~~ a substrate [[s]] is made in a single deposition process.

13. (previously presented) The method according to claim 1 wherein applied layers are thereafter removed.

14. (previously presented) The method according to claim 1 wherein at least one strained layer is produced on a thin relaxed layer.

15. (previously presented) The method according to claim 1, further comprising the step of

removing a layer by means of hydrogen or helium implantation.

16. (previously presented) The method according to claim 1 wherein the defect region is used as a separating plane.

17. (canceled)

18. (previously presented) The method according to claim 1 wherein for ion implantation, hydrogen ions or helium ions are used.

19. (currently amended) The method according to claim 18 wherein ions with a dose of 3 x 10^{15} through 4 x 10^{16} cm^{-2} are used for producing the defect region.

20. (previously presented) The method according to claim 1 wherein Si ions are used for the implantation.

21. (currently amended) The method according to claim [[1]] 20 wherein a dose of 1 x 10^{13} to 5 x 10^{14} cm^{-2} is used to produce the defect region.

22. (previously presented) The method according to claim 1 wherein for the implantation, hydrogen ions, carbon ions, nitrogen ions, fluorine ions, boron ions, phosphorous ions, arsenic ions, silicon ions, germanium ions, antimony ions, sulfur ions, neon ions, argon ions, krypton ions or xenon ions or an ion type of the layer material itself is used for producing the defect region.

23. (previously presented) The method according to claim 1, further comprising the step of

effecting a relaxation over a limited region of at least one layer.

24. (previously presented) The method according to claim 1, further comprising the step of

arranging a mask on the layers.

25. (previously presented) The method according to claim 1 wherein the one layer is relaxed only on the implanted region or is stressed.

26. (previously presented) The method according to claim 1 wherein the one layer is primarily irradiated with ions.

27. (previously presented) The method according to claim 1 wherein hydrogen or helium is implanted to a considerable depth and during a subsequent heat treatment, collects in a defect region and thus enables separation.

28. (previously presented) The method according to claim 27 wherein the dose for the hydrogen or helium implantation can be reduced for the separation.

29. (currently amended) The method according to claim 1 wherein in the layers primarily crystal defects or in the substrate

proximal to the epitaxial layer an extended defect region is produced.

30. (previously presented) The method according to claim 1 wherein the energy of the implanted ions is so selected that the mean range is greater than the total layer thickness of the epitaxial layer.

31. (previously presented) The method according to claim 1 wherein the thermal treatment is carried out in a temperature range of 550 degrees C to 1200 degrees C.

32. (previously presented) The method according to claim 1 wherein the thermal treatment is carried out in an inert, reducing, nitriding or oxidizing atmosphere.

33. (previously presented) The method according to claim 1 wherein the dislocation density after the growth amounts to less than 10^5 cm^{-2}.

34. (currently amended) The method according to claim 1 wherein a strained layer or an unstrained layer with a surface roughness of less than 1 nanometer [[are]] is produced.

35. (previously presented) The method according to claim 1 wherein layers comprising silicon, silicon-germanium or silicon-germanium-carbon or silicon carbide are deposited upon the substrate.

36. (previously presented) The method according to claim 1 wherein layers comprised of a III-V nitride, a II-VI compound semiconductor or an oxidic perovskite is deposited on the substrate.

37. (previously presented) The method according to claim 1 wherein Si-Ge is used as the material for at least one of the layers to be relaxed.

38. (previously presented) The method according to claim 1 wherein two Si-Ge layers are relaxed.

39. (previously presented) The method according to claim 1 wherein at least one layer with an additional carbon content of one to two atomic percent is provided and is relaxed.

40. (previously presented) The method according to claim 1 wherein an SOI substrate is used.

41. (previously presented) The method according to claim 1 wherein an Si layer with a layer thickness below 200 nanometers is used.

42. (previously presented) The method according to claim 1 wherein silicon, silicon germanium, silicon carbide, sapphire or an oxidic perovskite or a III-V or II-VI compound semiconductor is used as the substrate.

43. (previously presented) The method according to claim 1 wherein a wafer bonding is carried out.

44. (previously presented) The method according to claim 1 wherein the layers are bonded to a second substrate.

45. (currently amended) The method according to claim 1 wherein the layers are bonded to the substrate with an [[MI]] $\underline{\mathrm{Si}}\mathrm{O}_2$ layer.

46. (previously presented) The method according to claim 1 wherein the substrate is removed.

47. (previously presented) The method according to claim 1 wherein on a strained silicon region an n- or p- MOSFET is produced.

48. (previously presented) The method according to claim 1 wherein on at least a strained silicon germanium region as a nonrelaxed region of a layer, a p- MOSFET is produced.

49 -- 60. (canceled)